AMENDMENT

To the Claims:

1. (currently amended)A card reader connected between an external system side and a silicon storage device, comprising:

a silicon storage device connector, electrically coupled to a the silicon storage device; and

a bridge controller, electrically coupled to the silicon storage device connector, wherein when the bridge controller receives a read instruction, the bridge controller prefetches a part of data requested by the read instruction from the silicon storage device in advance, and saves the part of data in the bridge controller.

2. (currently amended) A bridge controller, embedded in a card reader electrically coupling to a silicon storage device and an external system side, comprising:

a microprocessor;

a silicon storage device interface, accessing said silicon storage device according to instruction of the microprocessor;

a system interface, receiving data transferred from buffers respectively according to instruction of said microprocessor;

a transmission buffer, electrically coupled to said silicon storage device interface and said system interface; and

a cache buffer, overlapping said transmission buffer to couple with said silicon storage device interface and said system interface; and

an allocation table buffer, electrically coupled to said system interface and said silicon storage device interface for storing a data accessing address mapping table;

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wherein, when said microprocessor outputting a read instruction, one of said buffers transferring alternatively to the system interface.

3. (cancelled).

4. (original) The bridge controller of claim 2, wherein means for transmitting data transmission operation is alternately and synchronously performed between said cache buffer and said transmission buffer.

5. (currently amended) A method for data transmission of a card reader, wherein said card reader comprising a transmission buffer, a cache buffer, a system interface, an allocation table buffer and a silicon storage device interface, and said method comprising:

receiving a first data requested by a read instruction, wherein said first data is received by at least one of said transmission buffer and said cache buffer;

wherein when either said transmission buffer or said cache buffer approaching full status, the other buffer storing a second data predetermined by said read instruction, the receipt of the first data is performed through a data accessing address mapping table stored in the allocation table buffer; and

outputting sequentially said data stored in said transmission buffer and said cache buffer.

6. (original) The method as cited in claim 5, said method further comprising a step for comparing said data stored in said buffers following said step of storing said second data, wherein said comparison step determining the first position of said second data following the last position of said first data.

7. (original) The method as cited in claim 5, further comprising:

removing said data from said transmission buffer and said cache buffer after outputting said data.

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8. (original) The method as cited in claim 5, wherein said method is alternately and synchronously performed to transmit data.

9. (original) The method as cited in claim 5, said card reader further comprising an allocation table buffer, and said method further comprising:

writing a data accessing address mapping table into said allocation table buffer;

updating content of said data accessing address mapping table with a written data according to a write instruction;

writing said written data into said silicon storage device through said silicon storage device interface from said cache buffer according to said content updated of said data accessing address mapping table; and

writing said data accessing address mapping table into said silicon storage device after completion of writing operation into said silicon storage device.

10. (original) The method as cited in claim 9, wherein said step of writing said written data into said silicon storage device through said silicon storage device interface from said cache buffer processing simultaneously with decoding data of said microprocessor.

11. (currently amended) A method for data transmission of a card reader, wherein said card reader comprising a transmission buffer, a cache buffer, a system interface, an allocation table buffer and a silicon storage device interface, said method comprising:

receiving a first data requested by a read instruction, wherein said first data is received by said transmission buffer;

storing a second data predetermined by said read instruction into said cache buffer when the transmission buffer approaching full status; and

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outputting sequentially said data stored in said transmission buffer and said cache buffer, wherein, the receipt of the first data is performed through a data accessing address mapping table stored in the allocation table buffer .

12. (original) The method as cited in claim 11, said method further comprising a step for comparing said data stored in said buffer following said step of storing said second data, wherein said comparison step determining the first position of said second data following the last position of said first data.

13. (original) The method as cited in claim 11, further comprising:

removing said second data from said cache buffer after outputting said second data.

14. (original) The method as cited in claim 11, wherein said method is alternately and synchronously performed to transmit buffer.

15. (original) The method as cited in claim 11, wherein said card reader further comprising an allocation table buffer, and said method further comprising:

writing a data accessing address mapping table into said allocation table buffer;

updating said content of said data accessing address mapping table with a written data according to a write instruction;

writing said written data into said silicon storage device through said silicon storage device interface from said cache buffer according to said content updated of said data accessing address mapping table; and

writing said data accessing address mapping table into said silicon storage device after completion of writing operation into said silicon storage device.

16. (original) The method as cited in claim 15, wherein said step of writing said written data into said silicon storage device through said silicon storage device

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interface from said cache buffer processing simultaneously with decoding data of said

microprocessor.

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